UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region III - 6th & Walnut Sts.

PPG Industries INC.

Natrium Plant, New Martinsville

SUBJECT: RCRA Inspection-WVD 00 433 6343

DATE: June 225, 1982

FROM:

Douglas A. Donor, Environmental Scientist Da P

RCRA Compliance and Superfund (3AW23)

TO:

File.

Thru: Robert L. Collings

Chief, Water & RCRA Enforcement Section (3RC12)

BASED UPON A REVIEW OF THE RCRA INSPECTION REPORT FOR THE FACILITY

REFERENCED ABOVE, I HAVE DETERMINED THAT NO FURTHER ACTION IS

5/20/81 inspection REQUIRED AT THIS TIME.

INSPECTION FACT SHEET

COMPANY NAME: PPG Industries

ID # WVD004336343

PLANT NAME: Natrium Plant

ADDRESS: Route 2 North

TYPE OF FACILITY: GEN, TSDF

P. O. Box 191

New Martinsville, WV 26155

COMPANY: CONTACT: Warren E. Dean

PHONE: (304) 455-2200

PURPOSE: Compliance Evaluation Inspection (CEI)

APPLICABLE REGULATIONS: 40 CFR Parts 260-265 (FR February 26 and May 19, 1980)

LIST OF CHEMICALS: D000, D001, D002, D003, F001, K073, K085, P022, U013, U019, U037, U070, U071, U072, U135, U151

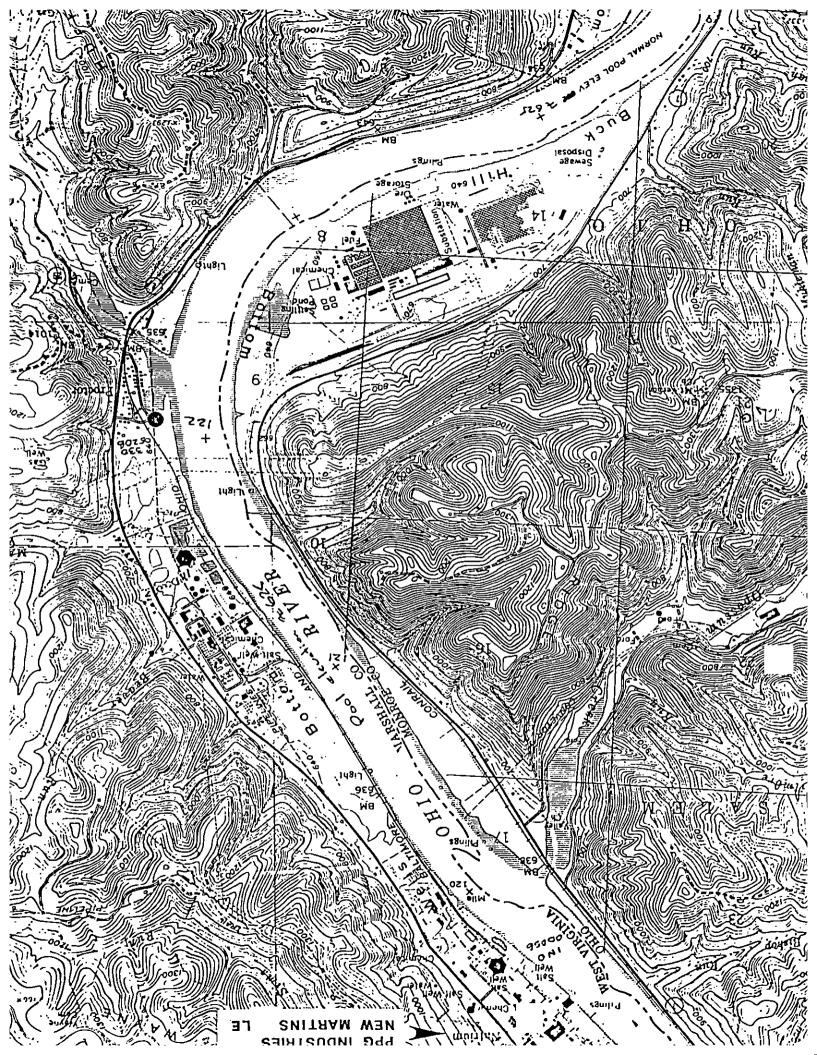
DATE INSPECTED: May 20, 1981

INSPECTORS:

- (1) Ken Hilsbos, West Virginia Division of Water Resources;
 Designated EPA Representative
- (2) Marie Cinquegranna, West Virginia Division of Water Resources

TABLE OF CONTENTS

- -- Location Map
- -- Trip Report
- -- Attachments:
 - "A" Checklist Generators
 - "B" Checklist TSD Facilities
 - "C" Checklist Chemical, Physical and Biological Treatment
 - "D" Checklist Surface Impoundments
 - $^{\prime\prime}E^{\prime\prime}$ Checklist Use and Management of Containers
 - "F" Copy of Manifest Form
 - "G" Site Map



TRIP REPORT

TO: Robert Jelacic, Subtitle C Inspection Coordinator

FROM: Ken Hilsbos, Inspector

RE: CEI - PPG Industries, Inc.: Natrium Plant (WVD004336343) -

May 20, 1981

DATE PREPARED: July 28, 1981 (from June 1, 1981 draft)

Marie Cinquegranna and this inspector (Ken Hilsbos) arrived at the PPG Industries, Inc. Natrium Plant, New Martinsville, WV, at about 9:30 a.m. The Charleston office of the Ground Water/Hazardous Waste Branch had arranged the inspection in advance. We met Bob Mitchell, Environmental Control Specialist.

Mr. Mitchell acknowledged our intent to inspect under Section 3007 (a) of the Resource Conservation and Recovery Act and consented to the inspection. This inspector showed his EPA credentials. The inspectors explained that Ms. Cinquegranna was not yet a designated EPA representative but was training to qualify for designation. We said she would accompany this inspector only if PPG Industries, Inc. consented. The company consented to Ms. Cinquegranna's presence. PPG Industries, Inc. did not claim confidentiality for any of this information.

The following PPG Industries, Inc. personnel joined for these portions of this inspection: Perry Blaire, of the Environmental Control Group, for parts of the morning records inspection session; James A. Fauber, Director of Employee Relations, for inspection of and safety equipment records; Jim Bronchik, Training Supervisor, for inspection of training and safety equipment records; John F. Knoop, Area B Superintendent, for inspection of Area B records and drum storage; Finley Amos, Organics Shipping Foreman; for inspection of Area B, including records; and Ken Walborn, Chlorine Area Superintendent, for tracifier storage (tank car) and treatment and lead sludge

cake storage and treatment.

In the morning we inspected records in the Environmental Control Group office. In the afternoon we inspected Subtitle C areas of the plant and inspected records at the Employee Relations office.

Mr. Mitchell said the facility receives no hazardous waste. Lead waste is stored in plastic-lined boxes under short-term rules. Other hazardous wastes are stored under long-term rules in drums, a tank car, and a double-lined NPDES surface impoundment.

The inspection raised the following questions:

- What will monitoring requirements be, specifically? (From B, #14F) (Mitchell)
- Participants did not pin down question #7 on surface impoundments checklist (ignitable or reactive wastes) enough to answer it.
- Is PPG Industries, Inc. incorrect in identifying their lead waste as both D008 and D003 on their manifests? (this inspector)
- 4. Is the fact sheet in error in identifying as D000 the waste which PPG Industries, Inc. identifies as D008 on their manifests? (this inspector)

Compliance Evaluation

The inspection revealed few deficiencies.

Area B and STB Warehouse (in the Marshall Plant) contained some rusty drums; a few drums had dents. Mr. Amos's explanation for the one bulged drum indicated no problem. Mr. Amos said the open drums (i.e. with tops, but with screw-lids off) were contaminated empties.

There were a variety of odors in the treatment and storage areas.

The secondary containment for the tracifier treatment area looked leaky, however, all or most of any small spillage would go to the sump. The tracifier waste storage (tank car) had no secondary containment. Secondary containment for Area B (waste oil from carbon disulfide production) had no impermeable liner. Run-off all goes to treatment, according to Mr. Mitchell. Kenneth Hilsbos.

	RCRA CHECKLIST FOR INSPECTION OF GENERATORS	RO USE
	Name of Facility: , G Industries, Inc. : Natrium Plant	Inspection file
	Address: 1.0. Pox 191	No.
•	New Martinsville WV 26155	Reviewer
<u>.</u>	EPA Generator ID Number: WVD004334343	Date reviewed:
	Facility Inspection Representative: Bob Mitchell	Form "A"
	Title: Environmental Control Specialist	
•, •	Telephone Number: 304/455-2200	
ert. Regs. C.F.R.	1. Please provide a brief narrative explaining the type of wor that occurs at the generator. Manufacture chlorine caustic, ammonia, chi	!
	C52, Nas, Na HS.	Willen Zene
		·
	2. Does the generator dispose of its wastes	
	A. On-site (Circle one or both) (B.) Off-site	
	Note: if on-site, then checklist for both a generator an facility must be completed if on-site more than 90	d TSD days.
	3. What is the amount of hazardous waste (in kilograms) product generator facility in a month? #1,000 in a year? #4 (If the amount is less than 1,000 kg/month, then the facili qualifies as a small generator and Form C should be complet of Form A.)	12,000
	4. What categories of hazardous wastes result from the generat facility? Please circle:	or's
	A. Ignitable wastes	(Yes No
_ =-	B. Reactive wastes	Ves No
•	C. Corrosive wastes	Yes No
: : :	D. EP Toxic wastes	Yes No
	E. RCRA Listed Waste	. Ø
•	Consider to the court of the contract of the c	

ASSACHMENT A

	1	
262.12	5. Is the general presently	•
1	A. Treating hazardous waste?	Circlé
· ; ·		Yes)
	B. Storing hazardous waste? > 70 days { 290 days	Yes
:	C. Disposing hazardous waste?	Yes (
	Note: if the generator performs any of the activities noted in Question 5, then the inspector must complete Form B, entitled "RCRA Checklist for inspection of hazardous waste treatment, storage and disposal facilities."	
262.20	6. Is a manifest system currently in operation at the generator's facility so that offsite shipment of hazardous wastes can be tracked?	Yes 1
	7. Please inspect the generator's manifest for the following information:	
	A. Is the TSD facility which receives a generator's hazardous waste identified by name, address, and EPA ID number?	
262 206-3	THE THE MAN THE PARTY OF THE PA	Yes N
262.20(c)	E. Is an alternative facility designated in case of an emergency?	
4	G Is a serialized manifest document number included on	Yes ()
	the form?	Yes
262.20(a)	D Is the generator's name, address, telephone number and	NI NI
262.22(2)		Yes No
262,20(a)	E. Is the name and identification number of each transporter included on the form?	(٧٥٥)
	F. Is a description of the generator's hazardous waste to be treated, stored, or disposed included on the manifest?	Yes N
	G. Is the quantity of each waste by units of weight or volume and the type and number of containers loaded in the trans-	Yes No
	port vehicle included on the manifest form?	Yes no
	H. Is the following certification noted on the generator's manifest form and is the certification acknowledged by the generator's signature?	
	"This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled and are in property."	. , -
262.22	according to the available regulations of the DOT and EPA."	(Yes No
202.22	I. Are there adequate copies of the manifest available for generator, transporter, and TSD's?	ves Nc
	Is hazardous waste being stored on-site by the generator for less than 90 days?	
160 244	If se, A. Is the date accumulation of	Yes No
162.34(a) (3)	A. Is the date accumulation of waste began clearly marked on each storage container?	<i>/</i> .
1		Ves No

262.34(a)(2) B. Are storage containers in good condition, i.e., no corrosion, leaking, or structural deformations?

Did not look at lead strage inspection records. 262.34(a)(4) At the time of accumulation, are the storage containers clearly labeled as containing a particular hazardous waste in accordance with DOT regulations? 9. Does the generator have an established contingency plan to deal with emergencies that may impact hazardous waste currently 265.16(#) Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste 265.16(d) Does the generator facility maintain a record of job titles 11. Yes for personnel that are involved with hazardous waste management and the name of the employee filling each job? 265.16(d)(2) Does the generator facility have on record a written position (Yes description for each job title noted in Question #11? Yes 265.16(d)(3) Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #11? 265.32(a) 14. *Does the generator facility have installed the following Yes An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion? Yes. A device at the scene of hazardous waste generator operations capable of summoning emergency assistance from Police, Fire Yes Fire control equipment and an adequate supply of fire fighting water or fire supression chemicals? 55.35 ° No Does the generator facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during 65.50 Does the facility have a contingency plan which contains the 65.52(c) A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, 55.52(d) Yes A detailed description of arrangements formally agreed to by local police, fire departments, and State and local emergency teams to provide assistance during emergency NORIMAC

N

265.52(d)	c. A listing of names, addresses, and phone numbers of the generator facility emergency response coordinators?	Yes
	Note: This listing should include names and phone numbers of emergency coordinators available on twenty-four hour basis.	
265.52(e)	D. A list of appropriate emergency equipment necessary to cope with emergencies at the generator facility?	Yes
265.52(f)	E. *An evacuation plan for the generator facility if Management believes such a plan is a definite requirement for their particular generator facility.	Yes
• • •	17. Please provide detailed comments on specific problems encountered during the inspection For instance, industry requests for clarification of specific RCRA rules and regulations and their applicability at the facility can be noted below or described in a separate memo attached to the inspector's checklist.	
		,
7.5		,
		•.
	Inspector's Name: NEW HILS BOS	4
	Title: RCRA INSPECTOR	•
	Agency: UV DNR Water RESOURCES	
	Date of Inspection: 5/20/8/	* * *
	Inspector's Name: MARIE K. CINAVEGRANNA	-
	Title: CO-OP ENGINEER	-
	Agency: <u>WY DNR WATER RESOURCES</u> Office location: <u>CHARLESTON</u>	•
	Date of Inspection: 5/20/8/	•

•	RCRA CHECK T FOR INSPECTION OF TSD FACIL ES	RO USE
	Name of Facility: PPG	Inspection File
	Address:	No.
		Reviewer
	EPA TSD ID Number:	Date reviewed
1	Facility Inspection Representative:	Form "B"
	Title:	
	Telephone:	-
		
	SITE CHARACTERIZATION (Please denote if the facility prese or disposes of hazardous waste. Als priate sub-category that occurs at facility.)	so, mark the appro-
	TREATER	DISPOSER
	Recycling/Recovery Chem/Phys/Bio Treatments Waste Oil Drum Above ground tank(s) Below ground tank(s) Other Tank	Landfill operation Land treatment Surface Impoundment Incineration Other
	Reprocessing baxes (plastic limit) Solvent Recovery Other	
· ; .		
	INSPECTION - PROCEDURE 1. Does the facility generate hazardous wastes? Note: Please complete the generator's checklist if TSD facility generator because the second of t	Yes No
	facility generates hazardous wastes which are disposed off-site.	
265.13(Ъ)	2. Does the facility have in place a waste analysis plan?	Yes No
	If so,	
265.13(a)	A. Does the plan enable facility personnel to identify wastes being handled by the facility?	hazardous Yes No
265.13(c)	B. Does the plan enable facility personnel to confirm a wastes actually received at the TSD facility are the indicated on the generator's manifest form?	e wastes NA Yes No
	3. *Does the TSD facility have a 24-hour surveillance system monitors and controls entry to the active portion of the All fenced. 24-hr. guard at main gar Other gates locked when untransfer	facility? (Yes) No

A. If not, does the facility have an artificial or natural boundary which surrounds active portions of the facility and,

/V# Yes

B. A means to control entry at all times, i.e., gates, attendants, locked entrances, etc.?

Yes

4. *Does the TSD facility have a restricted access sign posted at each entrance to the active portion of the facility? (An example would be: "Danger - Unauthorized Personnel Keep Out!"

If so,

'Yes

A. Is the sign legible from a distance of 25 feet?

Yes

B. Is the sign in English or any other foreign language predominant to the geographical area?

Yes

Does the TSD facility have an inspection log and a written schedule for inspecting all emergency equipment, security devices, and operating and structural equipment, important to the prevention, detection or response to environmental/human health emergencies?

Yes

6. Have facility personnel successfully completed a program of classroom training or on-the-job training in hazardous waste management procedures?

Yes

265.16(d)

265.16(d)(2)

2(___6(d)(3)

265.32(a)

265.16(a)

15(d)

.. 15(ъ)

265.14 (c)

7. Does the TSD facility maintain a record of job titles for personnel that are involved with hazardous waste management and the name of the employee filling each job?

Yes

8. Does the TSD facility have on record a written position description for each job title noted in Question #6?

Yes

9. Does the facility presently maintain a written description of the type and amount of introductory and continuing training for those employees noted in Question #6?

Yes

10.**Does the TSD facility have installed the following equipment:

An internal communications or alarm system capable of providing immediate emergency instructions to facility personnel if the hazardous waste storage area is threatened by fire or explosion?

Yes

B. A device at the scene of hazardous waste TSD operations capable of summoning emergency assistance from Police, Fire departments, etc.?

Yes

C. Fire control equipment and an adequate supply of fire fighting water or fire supression chemicals?

Yes

Does the TSD facility have adequate aisle space to allow the unobstructed movement of personnel and equipment during emergencies?

Yes

265.35

	-3-	
• .		
265.50	12. Does the facility have a contingency plan which contains the following elements:	
265.52(c)	A. A detailed description of emergency procedures facility personnel will implement in response to fires, explosions, or unplanned releases of hazardous wastes to air, soil, and water?	Yes No
265.52(d)	B. A detailed description of arrangements formally agreed to by local police, fire departments, and State and local emergency teams to provide assistance during emergency situations?	Yes No
265,52(d)	C. A listing of names, addresses, and phone numbers of the TSD facility emergency response coordinators? Note: This listing should include names and phone numbers of emergency coordinators available on twenty-four hour basis.	Yes No
2 52(e)	D. A list of appropriate emergency equipment necessary to cope with emergencies at the TSD facility?	Yes No
265.52(f)	E. *An evacuation plan for the TSD facility if Management believes such a plan is a definite requirement for their particular TSD facility?	Yes No.
265.55	Does the facility have at all times at least one employee either on-call or on the site who is responsible for coordinating all emergency response measures?	Yes No
	If so, please complete below:	
	Title: Guard (at main gate)	× =
32.00	Telephone Numbers 455 - 2200 (x 3361 daring be	us. hrs
265.73	contains the following information:	v. Con. Gros
265.73(b)(1)	A. A description and the quantity of each hazardous waste received and the method and date of treatment, storage or disposal?	NA Yes No
265.73(b)(2)	B. The location of each hazardous waste within the facility and the quantity at each location?	Yes No
265.73(ь)(3)	C. Detailed records and repults of waste analysis and treatability tests performed on wastes coming into the facility?	NA Yes No
265.73(b)(4)	b. Detailed operating summary reports and description of all emergency incidents that required the implementation of the facility contingency plan?	NA Yes No
265.73(b)(5)	E. Detailed records and results of inspections performed on facility emergency equipment, TSD systems, and hazardous waste areas?	Yes No

an Sa		_,	
	-4-		
		,	
265 72(1)			
265.73(b) (6)	F. Detailed monitoring, testing, and analytical data to insure compliance with the regulations? Plan to monitor grandwater at measure pand beginning a second to the preparation of	Yes	N
	written closure and post closure plans in order to meet the May 1981 target date for implementation of these requirements?	(les)	> N
265.71	16. Does the TSD facility receive hazardous waste from off-site generators?	Yes	(Ni
	If yes, are the following procedures implemented:	•	
N.	A. Manifest copies are signed and dated	Yes	Nc
*	B. A copy is given to the transporter	Yes	No
	C. A copy is sent to the generator	Yes	Nc
	D. A copy is returned and filed at the TSD facility	Yes	No
	Note: These requirements do not pertain to onsite facilities unless such facilities also receive hazardous wastes from off-site sources.	•	•••
265.90	17. Has the owner or operator implemented a groundwater monitoring program if surface impoundments, landfills or land treatment technologies are utilized at the facility?	Yes	N
	Note: Plan not required until one year after effective date of regulations.		
	The inspector should check for the following conditions at the TSD facility: Tracifier treatment & tank car strage:	` ;	
	A. Open fires strong, bity organic odor, probably from nextby process (es) is odor, possibly from process.	Yes	(Ng
Sugar de	B. Fumes or gases Slight oder in Hear O (arum strage)	ves	Nç
	C. Leaks or corrosion in containers or other storage structures Area B - Some draws slightly rusty.	Yes	> . Nc
X	D. Leachate to receiving streams	Yes	(K)
	E. Malfunction of equipment	Yes	. (N
· .	F. Bulging drums Area B - One bulged drum; F. Amos said from water, now empty but contaminated	Yes) _{No}
	G. Excessive heat generation from storage facilities, lagoons, storage piles, etc.	Yes	No
		,	Ü
h. 2		. •	t.
			-
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19.	for clarifica applicability	D facility inspi tion of specific at the facility	ection. For inst. rules and regul.	low or described i	vests
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Inspecto	or's Name: /e	EN HILEBO	<u> </u>		
Title: _					4
Agency:					•
Office 1	ocation:	· · · · · · · · · · · · · · · · · · ·			
Date of	Inspection:	5-120/8/	·····		
Ingnesto	-'s Names <i>W</i>	April V	NQVEGRANA	10	
Title:	I s Name: ///	HICIE K. CI	NGVEGEANN	(7)	
Agency:	· · · · · · · · · · · · · · · · · · ·				 ,
Office 1	ocation:		 :		
Date of	Inspection:	5/20/8/			· · ·

(Subpart Q Part 265.40 - "General Operating Requirements"	Inspection file No
Name of Engility: PPG	
Name of Facility: PPG	Reviewer:
EPA Generator ID Number:	Date Reviewed:
Facility Inspection Representative:	
Title:	Form "Q"
Telephone Number:	
at hazardous wastes by chemical, physical, or biological methods in other face impoundments and land treatment facilities except as Section 265.1 Pert. Regs. O C.F.R. Part: Canal Can	provides otherwise.
1. Are all treatment processes or equipment in good condition i.e., not showing signs of leakage, corrosion or any other deterioration? 1. Are treatment processes or equipment with continuous infloront of hazardous waste equipped with a means to stop this influence, waste feed cutoff system or bypass system to a stan containment device) 265.401(c) 2. Are treatment processes or equipment with continuous infloront hazardous waste equipped with a means to stop this influence.	w ov?
02(1) 3. Are waste analyses performed or written documentation obta 6 (2) before placing a substantially different hazardous waste i	ined
treatment processes or equipment? i.e. Do, not change, but would analyze, etc., if h	
4. Is this information recorded in the facility's operating r	ecord? Yes No
265.403(a) (1) 5. Are daily inspections conducted for discharge control equi (e.g., bypass systems, waste feed cut-off systems, drainag systems and pressure relief systems)?	pment e NA Yes No
6. Is data gathered from monitoring equipment (e.g., pressure temperature gauges) at least once each operating day?	and Yes No
7. Are construction materials of the treatment process or equal and immediate surrounding area inspected weekly for signs leakage, corrosion or any other deterioration?	ipment of Yes No

1, Physical and Biological Trement

R.O. USE

RCRA Checklist for Chem

Ńо

		or summary? Lead filtration - NA	Yes
			Yes
265.405(a) (1)	Α.	immediately after placement in the treatment process or equipment so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive wastes under Section 261.21 or 261.23	Yes
265.405(a) (1)	В.	from any material or conditions which may cause the waste to	Yes
-	10. Are	incompatible wastes kept from being placed in the same atment process or equipment?	Yes
	Inspect	or's Name: Tenneth Heleba	
	: Title:		
	Agency:		
• • • •		Location	· -
	Date of	Inspection: 5/20/P/	
• •	Inspect	or's Name: MARIE K. CINDUEGRANNA	
	Title:		_
• • •	Agency:	her for not removed but went such as the first	· ·
À.	Office	Location:	
	: Date of	Inspection:	-
· • · · · · · · · · · · · · · · · · · ·			-

• • •	RCRA Checkl for Surface Impoundments	•
		R.O. USE
,	(Subpart K Section 265.222 "General Operating Requirements"	Inspection file N
Name of Fac	ility: PPG	
Address:		Reviewer:
EPA Generat	or ID Number:	Date Reviewed:
Facility In	spection Representative:	
		Form "K"
Telephone N		!
Pert. Regs.	impoundments to treat, store, or dispose of hazardous waste, ex des otherwise. NO = Not determined.	cept as Part
Part: 265.222	1. Is 2 ft. of freeboard maintained in the surface impoundment	? Yes No
265.223	2. Do all earthen dikes have protective covers (e.g., grass, shale or rock) to minimize wind and water erosion and to preserve dike structural integrity?	Yes No
265.225(a) (1) & (2) 205.226(a)	3. Are waste analyses conducted or written documentation obtain before placing a substantially different hazardous waste in a surface impoundment used for storage or treatment? i.e. Do not change; but would analyze, etc., it is the freeboard level inspected at least once each operation.	to Yes No
265.226(a) (2)	5. Is the surface impoundment, including dikes and vegetation, inspected once per week to detect leaks or deterioration or failures in the impoundment?	Yes No
•	6. Are the results of these inspections recorded in an inspect log or summary?	ion (Yes) No
265.229(a)	7. Are ignitable or reactive wastes stored in a surface impoundment: If so,	NZ Yes %o
265.229(a) - (1)	a) Is the waste treated, rendered, or mixed before or immediately after placement in the impoundment so that the resulting waste, mixture or dissolution of material no longer meets the definition of ignitable or reactive waste under parts 261.21 or 261.23 of the RCRA regulation	ND ons? Yes No

for Surface Impoundments

RCRA Check1

7	6	5	2	3	n

b) Are incompatible wastes segregated in separate surface impoundments so that spontaneous reactions are avoided?

VA Yes

No

Inspector's Name: Xenneth Helsha

Title:

Agency:

Office location:

Date of Inspection: \$\frac{120}{5}\frac{1

	RCRA Checklist for and Management of Container	
. (Sut	opart I Section 265.170 - "General Operating Requirements"	R.O. USE
:	,	Inspection file No
Name of Fac	ility: PPG	
Address:	nevi-S	Reviewer:
EPA Generat	or ID Number:	Date Reviewed:
Facility In	spection Representative:	· · · · · · · · · · · · · · · · · · ·
Title:	\$ 52.6	Form "I"
Telephone N	umber:	ę .
Pert. Regs. 40 C.F.R. Part:	that store containers of hazardous waste, except as Section 265.1 Drums, tank car, boxes. 4. location	provides otherwise
265.171 265.171	1. Are all containers in good condition, i.e., not showing sign of leakage or corrosion or any other deterioration/deformations. 2. Are containers lined or made of materials compatible with hazardous wastes placed into them so that the container will not react or corrode with the hazardous wastes?	ion? Yes No lightly deaded.
265.173(a) 2 174	3. Are all containers holding hazardous waste kept closed duri storage? Area B- Some drums open. F. Amos said contaminated with sold S. 4. Are areas where hazardous waste containers are stored inspends the owner/operator at least once a week?	empty, Yes No
265.15(d) 265.15(b)	5. Is an inspection log maintained? (See question #5 of TSD checklist.)	Yes No
265.176	6. Are containers holding ignitable or reactive waste located at least 50 ft. from the facility's property line?	Yes No
265.177(a)	7. Are incompatible wastes placed in the same container? (See Appendix 5 for examples.)	Yës No
265.177(c)	8. Are storage containers holding hazardous wastes which are incompatible with nearby materials stored in containers, to piles, or surface impoundments separated by dikes, berms, was or other devices? No in compatible westes	inks, AA Alls, Yes No

Inspector's Name: Lemet Helebra	
Title:	
Agency:	
Office location:	
Date of Inspection: 5/20/PI	
Inspector's Name: MARIE K. CINQUEGRANNA	
Title:	
Agency:	
Office locations of the second	Service Supply
Date of Inspection: 5/20/8/	·
कराजा का के क्षेत्रक में के किस के अवस्था	A STATE OF THE STA

he the respectific sheeter

HAZARTOUS WASTE MANIFEST

Instructions: Generator: Retain green cop.

Transporter #1: Retain canary copy

Transporter #2: Retain pink copy

T/S/D Facility: Retain golden rod copy

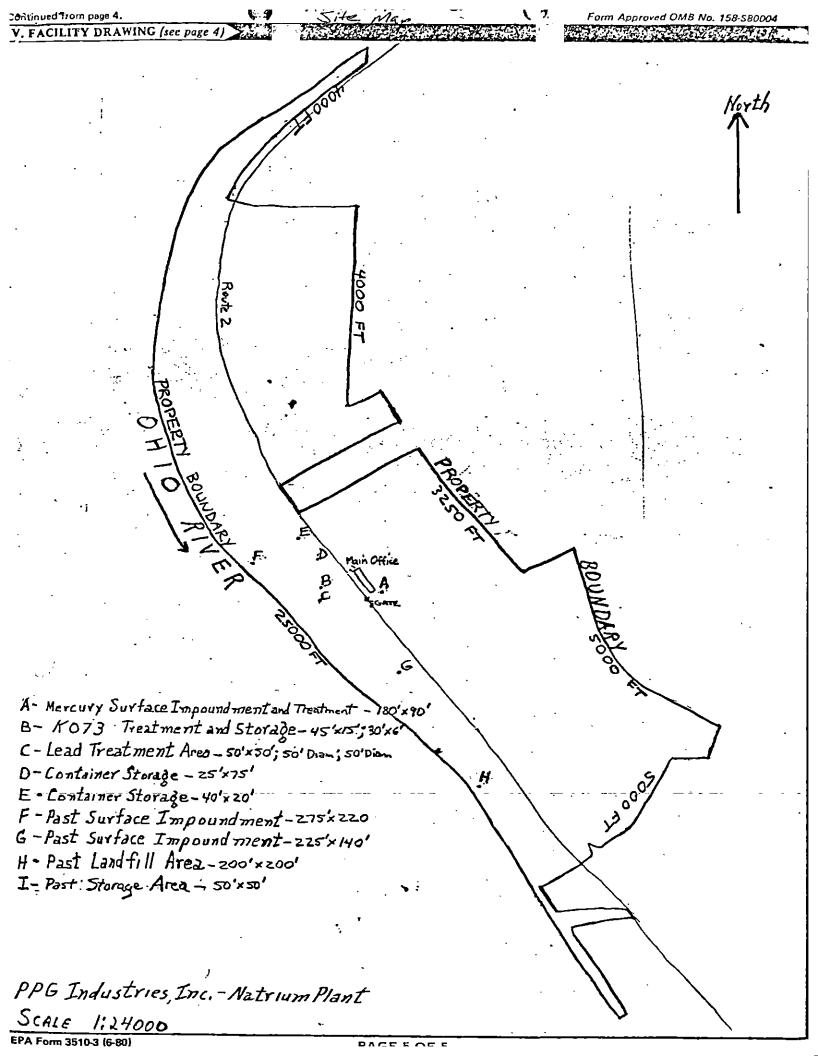
Return white original and white Certificate

INDUSTRIES

Manifest Document Number

of Waste Management to Generator

	Additional copy:		e copy		٠.	-
City	· · · -	_ St	Zip	Transporter #1 Address City Phone I	State EPA I.D.#	Zip
TREATMENT	· · · · · · · · · · · · · · · · · · ·		Information on spills, property			<u>·</u>
STORAGE FE DISPOSAL. Address	<u> </u>	_	ateZip	Address — SECOND Phone — IF	ARY	,
Phone	E	PA 1	J.D.#	Phone IF	State; EPA 1.D.#	
lo Jnits & Container Type	Weight or Volume	RQ	D.O.T. Proper Shipping Nam (no abbreviations)		D.O.T. I.D. #	EPA Hazardous Waste #
		ļ				
	EQUIRED ng Instructions	and	Comments			
		-	CERTIFICA	TION		
proper condition	n tor transportai	ion a	med materials are properly cla according to the applicable reg acy and applicable state and I	gulations of the U.S. Departm	i, marked and labe ment of Transportat	èd, and are in lìon and the
TRANSPORTES SIGNATURE	R #1		hazardous waste shipment. (1	Transporter's signature indic	ates applicable D.	O.T. placards
TRANSPORTE		i the	hazardous waste shipment.	DATE		
TREATMENT F	fy acceptance of acility ignature	f the	hazardous waste for treatmen		CERTIFICATE OF WA ATTACHED TO BE RETURN	



PPG INDUSTRIES

- ENCLOSED 1981 GROUNDWATER MONITORING DATA

WASTE	AMT. (REPURT)	AMT, (REPORT)
FOO 1 (502)	105,170 (P)	NOT LISTED
000 l (501)	1200 (P)	NOT LISTED
000 1 (so1)	2200 (1)	NOT LISTED
K106 (504)	175000 (8)	AMT, NOT PROBERLY ADDED

TABLE I
FIRST 1983 SEMIANNUAL WELL SAMPLING DATA VERSUS 1982 BACKGROUND WELL

FIRST 1983 SEMIANNUAL WELL SAMPLING RESULTS

19	82 BA	CKGROUND W	ELL	GM-0 BACKGRO	UND REGULA	R SAM	PLE GM-0	RESAMPLE	
Paramet	er ·	Variance	Mean	Variance	Mean	<u>ssi</u> 1	Variance	Mean	<u>ssi</u> 1
pH Spec. Co TOC TOX	nd.	0.075 2212 1.467 1225	7.12 618 3.37 49	0.0025 2.667 0.0333 91.66		Yes No Yes Yes	0.0079 1250 1.896 50	7.075 612.5 3.59 52.5	No No No
•				GM-1 DOWNGRAD	IENT REGUI	AR SA	MPLE GM-1	RESAMPLE	•
pH Spec. Co TOC TOX	nd.			0.0025 2.25 0.020 33.33	7.33 · 1087 13.4 55	No Yes Yes No	2857 4.55	1050 10.59	Yes Yes
		}		GM-2 DOWNGRAD	IENT REGUI	LAR SA	MPLE GM-2	RESAMPLE	
pH Spec. Co TOC TOX	nd.			0.0358 4.667 0.4225 91.67	7.23 1293 11.78 37.5		2679 1.46	1262.5 5.83	Yes Yes
		•		GM-6 DOWNGRAD	IENT REGU	LAR SA	MPLE GM-	RESAMPLE	
pH Spec. Co TOC TOX	ond.	er e		0.00333 0.9167 0.0892 33.33	7.15 1028 10.03 25	No Yes Yes No	2679 1.67	962.5 9.36	Yes Yes

¹ Statistically significant increase (or pH decrease) according to 40 CFR 265.93(b).

TABLE II
SECOND 1983 SEMIANNUAL WELL SAMPLING DATA VERSUS 1982 BACKGROUND WELL

	=		<u>S</u>	ECON	ט א	EMLAN	N U A L	M Tr Tr	J SAM	<u> </u>	G 1	(B 2 0 F I		, L
1982 BA	CKGROUND W	ELL	<u>GM-0</u>	BACKGRO	DUND	GM-1 D	OWNGRADIE	NT	GM-2 DO	WNGRADIE	<u>NT</u>	GM-6 DC	WNGRADI	EN'
Parameter	Variance	Mean	Vari- ance	Mean	<u>ssi</u> 1	Variance	Mean	ssI1	Variance	Mean	<u>ssi</u> 1	Variance	<u>Mean</u>	<u>ssi</u> 1
рН	. 0.075	7.12	0	7.0	No	0,	7.5	Yes	0	7.1	No	0	7.4	Yes
pH Resample	•	,				.0025	6.975	No	• .			.01333	6.9	No
Spec. Cond.	2212	618	33.67	392.5	No	100.92	666.3	Yes	167	825.5	Yes	25	626.5	No
TOC	1.467	3. ³ 7	. 0.15	5.65	Yes	0.27	18.15	Yes	0.0667	15.06	Yes	0.06	. 10.7	Yes
TOX	1225	49	66.67	40.	No	25	22.5	No	33.33	35	No	Bad	Sample	

 $^{^{1}}$ Statistically significant increase (or pH decrease) according to 40 CFR 265.93(b).

TABLE III

40CFR265.94(a)(2)(iii) GROUNDWATER SURFACE ELEVATIONS IN 265.92(e)

GROUNDWATER SURFACE ELEVATIONS

(Relative to Mean Sea Level, Feet)

	•	_	•	•	First	198 <u>3</u>	Second	<u> 1983 </u>
	11/81	3/82	6/82	9/82	Semiannual	SA Resample	Semiannual	SA Resample
GM-1	612.3	611.1	610.9	611.6	611.9	612.6	612.7	613.0
GM-2	623.6	622.5	621.3	622.2	622.5	620.3	620.3	(1)
GM-6	631.1	642.4	636.7	633.0	653.7	622.6	622.0	624.3

⁽¹⁾ Resample was not necessary.

ATTACHMENT 1: Results of analysis of ground water samples from PPG Surface Impoundment, Natrium, WV

Chemical Analyses

(Analyses in mg/l unless otherwise stated)

Sampling Point

Parameter	GM-O	GM-1	GM-6
TOC	2 .	.12	N.T.F.
	_		
Chloride	27	27	N.T.F.
Sulfate	121	1	N.T.F.
*Phenolics	· 1	4	N.T.F.
*Arsenic	< 2	20	3
Lead	<.01	.03	-04
Barium	.06	1.2	.24 .
-Cadmium	.001.	-002	.003
*Mercury	< .1	.23	<.1

^{*}Analyses in ug/l N.T.F. = Not Tested For

(Analyses in ug/l)

Sampling	Point
*** 1 7 7	

	Field				
Parameter	Blank	GM-O		GM-l	GM-6
Methylene Chloride	N.D.	1.78	•	10	11.1
1,2-Dichloroethene	N.D.	N.D.	•	25.4	53.4
1,1,1-Trichlorcethane	N.D.	N.D.		-688	N.D.
1,1,2-Trichloroethane	N.D.	N.D.		11.0	24.5
Bromoform	N.D.	N.D.		3.40	5.91
Tetrachloroethene	- N.D	510		28.9	26.0_
Chloreform	N.D.	N.D.		-916	1.60
Carbon Tetrachloride	N.D.	N.D.		1.27	2.12.
Trichloroethene	N.D.	7.91	•	10.7	24.2
Benzene	N.D.	N.D.		4.10	7.0
1,4-Dichlorobenzene	N.D.	N.D.		5.0	8.0
1.2-Dichlorobenzene	N.D.	N.D.	-	10.1.	15.7
Volatiles	N.D.	N.D.		N.D.	N.D.
Aromatics	N.D.	N.D.		Ň.D.	N.D.

N.D. - None Detected

Samples collected on Awarst 7, 1988 .

TABLE I

COMPARISON OF 1983 DOWNGRADIENT WELLS VS. 1982 BACKGROUND WELL

1983 DOWNGRADIENT WELL

1982 BAC	KGROUND WELL				_			
•			GM-1 R	tegular Samp	<u>ole</u>	. <u>GM</u> -	1 Resample	
Parameter	Variance	<u>Mean</u> .	Variance	. <u>Mean</u>	<u>ssi</u> 1	Variance	Mean	SSI ¹
рН	0.075	7.12	0.0025	7.33	No			
Specific Cond.	2212	618	.2.25	1087	Yes	2857	1050	Yes
TOC	1.467	3.37	0.020	13.4	Yes	4.55	10.59	Yes
TOX	1225	49	33.33	55	No			-
	. :	,						
		•	•		• •	•		
			GM-2 F	legular Samp	<u>le</u>	<u>GM-</u>	2 Resample	•
	.' `	•		7 00	37 .	•		
pН		•	0.0358	7.23	No	0670	1060 5	V
Specific Cond.			4.667	1293	Yes	2679	1262.5	Yes
TOC	i.		0.4225	11.78	Yes	1.46	5.83	Yes
TOX .			91.67	37.5	No		•	
	4							
	1			· 1		·	6 Resample	
	, '		(7M-0 B	tegular Samp	ore.	GM-	O Resample	
рН .			0.00333	7.15	No		•	
Specific Cond.	•		0.9167	1028	Yes ·	2679	962.5	Yes
TOC	1		0.0892	10.03	Yes		9.36	Yes
•		•	and the second s	25		1.07	7.50	
TOX		•	33.3	23	No			

¹ Statistically significant increase (or pH decrease) according to 40 CFR 265.93(b).

40 CFR 265.94 (a)(2)(iii) Groundwater Surface Elevations in 265.93 (f)

Groundwater Surface Elevations (Relative to Mean Sea Level, Feet)

	11/81	3/82	6/82	9/82
GM-1	612.3	611.1	610.9	611.6
GM-2	623.6	622.5	621.3	622.2
GM-6	631.1	642.4	636.7	633.0

Note: Reference Well GM-0 is northwest of the active impoundment and Wells GM-1, GM-2, and GM-6. It is not an up-gradient well because the uppermost aquifer does not occur up-gradient of the impoundment and monitoring wells. There is no means of measuring the groundwater surface elevation at Well GM-0, which is in continuous operation.

40 CFR 265.94 (a)(2)(ii) Value of Parameters in 265.92 (b)(3) for Each Groundwater Monitoring Well

Well	No.	GM-0	(Reference Well)
------	-----	------	------------------

	1/4/82	<u>5/10/82</u>	8/3/82	11/15/82	Arithmetic Mean	Variance
рН	8.1, 7.2 7.1, 7.1	7.0, 7.0 7.0, 7.0	6.9, 7.1 7.1, 7.1	7.2, 7.0 7.0, 7.0	, 7.1	.01
Specific Conductance, u mho	760, 630 620, 630	600, 600 600, 600	570, 571 570, 570	644, 652 633, 634	618	1640
Total Organic Carbon, mg/l	4.0, 2.4 2.3, 2.6	1.75, 1.82 1.84, 1.78	4.7, 4.5 4.4, 4.3	4.5, 4.4	3.4	1.71
Total Organic Halogen, µg/l	20, 20 20, 20	100, 70 70, 100	120, 40 70, 50	20, <20 <20, <20	49	1140
Well No. GM-1				· 10 m 100	Arithmetic	Thousand
рН	1/4/82 7,1, 7.1 7,1, 7.1	5/10/82 7.4, 7.4 7.3, 7.3	8/3/82 7.5, 7.3 7.3, 7.3	11/15/82 7.1, 7.1 7.2, 7.2	Mean 7.25	Variance 0.02
Specific Conductance, µ mho	1100, 1000 1010, 1100	900, 900 900, 900	966, 966 948, 944	1075, 1073 1065, 1065	995	6473
Total Organic Carbon, mg/l	23.8, 26.0 22.6, 21.4	5.86, 5.69 5.88, 5.71	13.5, 14.5 14.9, 14.0	23.4, 23.0 22.5, 22.1	16.6	69.5
Total Organic Halogen, µg/l	<20, <20 <20, <20	180, 170 170, 170	90, 90 70, 90	50, 30 20, 20	77 .	4913 .

Well	No.	GM-2
------	-----	------

Well Mr. Gil 2	. <u>1/4/82</u>	5/10/82	8/3/82	11/15/82	Arithmetic Mean	Variance
рН	7.1, 7.1 7.1, 7.1	7.2, 7.2 7.1, 7.1	7.1, 7.1 7.1, 7.1	7.1, 7.1 7.1, 7.1	7.11	.0006
Specific Conductance, µ mho	1380, 1390 1370, 1380	1200, 1200 1200, 1200	1123, 1162 1151, 1165	1282, 1271 1261, 1249	1249	9864
Total Organic Carbon, mg/l	8.9, 20.8 8.3, 13.6	5.58, 5.39 5.38, 5.36	3.5, 3.4 3.3, 3.2	7.6, 7.5 7.4, 7.0	7.3	17
Total Organic Halogen, µg/l	<50, <50 <50, <50	80, 100 90, 100	<20, 20 20, 40	30, <20 30, <20	. 48	999
Well No. GM-6	1/4/82	5/10/82	<u>8/3/82</u>	11/15/82	Arithmetic <u>Mean</u>	<u>Variance</u>
рН	7.1, 7.1 7.1, 7.1	7.2, 7.1 7.1, 7.2	7.3, 7.3 7.2, 7.2	7.2, 7.2 7.1, 7.0	7.15	.0045
Specific Conductance, µ mho	850, 850 850, 840	1000, 1000 1000, 1000	833, 811 857, 875	884, 879 901, 898	896	5283
Total Organic Carbon, mg/l	19.1, 21.2 20.9, 21.7	3.61, 3.67 3.73, 3.64	8.9, 9.2 9.2, 9.2	7.3, 7.3 7.4, 7.4	10.2	54
Total Organic Halogen, µg/l	20, 20 20, 20	40, 40 50, 30	20, 30 20, 20	<20, <20 <20, <20	25	95

MERCURY IMPOUNDMENT FOURTH QUARTERLY MONITORING RESULTS November 15, 1982 (Concentration in mg/1 except as noted)

	EPA Maximum*	MONITOR	RING WELLS	
Parameters	Level Standard	GM-0 GM-1	. GM-2	GM-6
Arsenic	0.05	<0.005 0.095	0.019	0.011
Barium	1.0	. 0.074 1.40	0.360	.0.650.
Cadmium	0.01	<0.010 0.010	0.010	<0.010
Chromium	0.05	<0.010 0.010	<0.010	<0.010
Fluoride	1.4-2.4	2.0. 1.0	1.0	1.0
Lead	0.05	0.016 0.045	<0.005	0.240
Mercury	0.002	<0.0005 <0.0005	<0.0005	0.0009
Nitrate (as N)	10	1 4.1 0.14	0.13	0.29
Selenium ·	0.01	<0.005 <0.005	<0.005	<0.005
Silver	0.05	0.010 0.010	<0.010	0.010
Endrin	0.0002	<0.0002 <0.0002	<0.0002	<0.0002
Lindane	0.004	<0.004 <0.004	<0.004	<0.004
Methoxychlor	0.1	<0.100 <0.100	<0.100	<0.100
Toxaphene	0.005	<0.005 . <0.005	<0.005	<0.005
2,4-D	0.1	<0.100 <0.100	<0.100	<0.100
2,4,5-TP Silvex	0.01	<0.010 <0.010	<0.010	<0.010
Radium 226, 228 pCi/1.	5 pCi/1	<1 <1	<1	insuff.
Gross Alpha pCi/1	15 pCi/1	<1 <1	5	
Gross Beta pCi/1	4 milli Rem/yr.	<5 <5	<5	sample
Coliform Bacteria	1/100 ml	<1 60	<1	<1

^{*}Section 265.92(b)(1), Appendix III - EPA Interim Primary Drinking Water Standards, FR Vol. 45, No. 98, 5/19/80 33257

MERCURY IMPOUNDMENT THIRD QUARTERLY MONITORING RESULTS August 3, 1982

(Concentration in mg/1 except as noted)

	EPA Maximum*	M	MONITORING WELLS			
Parameters	Level Standard	GM-0	<u>GM-1</u>	<u>GM-2</u>	<u>GM-6</u>	
Arsenic	0.05	<0.005	0.054	0.012	<0.005	
Barium	1.0	0.070	0.832	0.355	0.247	
Cadmium	0.01	< 0.004	0.063	0.030	<0.004	
Chromium	0.05	0.006	0.017	0.010	0.010	
Fluoride	1.4-2.4	1.3	2.0	1.0	2.0	
Lead	0.05	.0.014	0.736	0.003	0.030	
Mercury	0.002	0.0001	0.0002	0.0001	0.0003	
Nitrate (as N)	10	4.6	0.54	0.50	0.77	
Selenium	0.01	<0.005	<0.005	< 0.005	<0.005	
Silver	0.05	<0.004	0.005	0.005	0.005	
Endrin	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Lindane	0.004	<0.004	< 0.004	<0.004	<0.004	
Methoxychlor	0.1	<0.10	<0.10	<0.10	<0.10	
Toxaphene	0.005	<0.005	< 0.005	< 0.005	<0.005	
2,4-D	0.1	<0.10	<0.10	<0.10	<0.10	
	0.01	<0.01	<0.01	<0.01	<0.01	
2,4,5-TP Silvex	5 pCi/1	1.6	<1.6	<1.6	<1.6	
Radium 226, 228 pCi/l		<2	<2	<2	<2	
Gross Alpha pCi/1	15 pCi/1	7	< 3	3	< 3	
Gross Beta pCi/1	4 milli Rem/yr	/		<5	<5	
Coliform Bacteria	1/100 ml	<1	1			

^{*}Section 265.92(b)(1), Appendix III - EPA Interim Primary Drinking Water Standards, FR Vol. 45, No. 98, 5/19/80 33257

MERCURY IMPOUNDMENT SECOND QUARTERLY MONITORING RESULTS May 10, 1982 (Concentration in mg/1 except as noted)

	EPA Maximum*		MONITORING WELLS		
Parameters	Level Standard	GM-0	GM-1	GM-2	GM-6
senic	0.05	<.005	0.043	0.009	<.005
arium	1.0	.064	1.1	0.44	0.16
cdmium	0.01	<.003	0.026	0.036	0.004
eromium	0.05	.011	0.017	0.020	0.014
Tluoride	1.4-2.4	1.0	1.0	1.0	2.0
ead	0.05	<.005	0.016	0.012	<.005
ercury	0.002	.0002	0.0002	<0.0002	0.0002
trate (as N)	1.0	6.8	1.5	0.6	1.0
elenium	0.01	<.005	<.005	<.005	<.005
lver	0.05	<.004	<.004	<.004	<.004
andrin	0.0002	<.0002	<.0002	<.0002	<.0002
lindane	0.004	<.004	<.004	<.004	<.004
rthoxychlor	0.1	<.005 '	<.005	<.005	<.005
rkaphene	0.005	<.005	<.005	<.005	<.005
4-D.	0.1	<.010	<.010	<.010	<.010
4,5-TP Silvex	0.01	<.010	<.010	<.010	<.010
** iium 226, 228 pCi/1	5 pCi/1	<1.6	2.4 ± 1.2	1.2 ± 1	<1.6
6 css Alpha pCi/l	15 pCi/1	<2	<2	<2	<2
oss Beta pCi/l	4 milli Rem/yr	<3	. <3	<3	< 3
liform Bacteria	1/100 ml	<1	<20	<5	<20

Pection 265.92 (b)(1), Appendix III - EPA Interim Primary Drinking Water Standards, FR Vol. 45, No. 98, 5/19/80 33257

U. S. ENVIRONMENTAL FROTECTION AGENCY WESTERN REGIONAL LABORATORY AND ENVIRONMENTAL CENTER WHEELING, WEST VIRGINIA

Source: Well Sample, Citizens Complaint, Water Lab #83031931/E, Russel Zesiger Residence, Rt. 1, Box 15 (Basement), Receiving Stream: Obio River, Ubio Basin, Pructor, Wetzel County, West Virginia

Grab Sample

Date	Parch 19, 1922
Time	1045
Temperature (Water) Oc	10.71
pN (Field)	7.65
pH (Lab)	8.2
Acidity, mg/1	0.2
Alkalinity, mg/l	214
Hexavalent Chromium, pg/l	0
Ammonia-Nitrogen, mg/:	.28
Total Magnesium, mg/1	2.3
Total Sulfide, mg/l	0.00
Total Sodium, mg/i	92
Total Armanic, pg/l	<5
Total Barium, µg/l	<100
Total Cadmium, 19/1	<10
Total Chromium, pg/i	<20
Total Iron, hg/1	55
Total Lead, µg/l	<5
Total Mercury, µg/l	<0.2
Total Nickel, ng/l	<20
Total Selenium, 19/1	<3
Total Silver, rg/l	<10
Total Vanadium, ng/1	<100
Total Zinc, 1/1	130

3/19/82

MERCURY IM JUNDMENT FIRST QUARTERLY MONITORING RESULTS JANUARY 4, 1982 (Concentration in mg/l except as noted)

	EPA Maximum*		MONITORING	WELLS	
Parameters	Level Standard	<u>GM-0</u>	GM-1	<u>GM-2</u>	<u>GM-6</u>
Arsenic Barium Cadmium Chromium Fluoride Lead Mercury Nitrate (as N) Selenium Silver Endrin Lindane Methoxychlor Toxaphene 2,4-D 2,4,5-TP Silvex	0.05 1.0 0.01 0.05 1.4-2.4 0.05 0.002 10 0.01 0.05 0.002 10 0.01 0.05 0.0002 0.004 0.1 0.005 0.1 0.001	<.005 0.070 <.010 <.010 0.8 <.010 <.0002 7.5 <.005 <.010 <.0002 <.0001 <.003 <.003 <.010 <.010			GM-6 0.009 0.27 0.041 0.022 1.2 0.016 0.0002 1.68 <.005 <.01 <.0002 <.0001 <.003 <.003 <.010 <.010 2.6 ±.8, 3.1 ±.2
Radium 226, 228 pCi/1 Gross Alpha pCi/1	5 pCi/1 15 pG:/1	<0.6, <1	16 ±9	<2	12 ±9
	4 milli Rem/yr 1/100 ml	<3 <1	43 ±9 1500	19 ±6 500	13 ±5 54,000

^{*}Section 265.92 (b)(1), Appendix III - EPA Interim Primary Drinking Water Standards, FR Vol. 45, No. 98, 5/19/80 33257